# Automating Pluribus Open Netvisor Linux (ONVL) with Ansible

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**Pluribus**
**NETWORKS**

# Pluribus Networks

Pluribus Networks provides data center solutions that allow your business to run unconstrained with complete agility and visibility. Our software-defined, open networking, fabric and analytics solutions transform existing network infrastructures into flexible and strategic assets fully aligned with today's digital business needs.

The traditional network topologies in place today simply can't deliver the required level of elastic networking resources and visibility that every modern organization needs to survive and thrive. While modern business is driving much of IT innovation, the network has lagged behind.

SDN addresses the cost, complexity, operational manageability, and adaptability challenges of traditional data center infrastructures with a forward-looking approach that brings the benefits of open-computing, virtualization, and cost efficiency.

Software-Defined Networking addresses the following key challenges:

Agility: How can I create an IT infrastructure that can change with my business, supporting new business initiatives and applications on demand?

Complexity: Pluribus Open Netvisor Linux (ONVL) simplifies network configuration tasks with its single point of management fabric and provides Python CLI, RESTful, C and Java API's.

Manageability: Pluribus has also added support for standard Devops automation tools like Ansible. Ansible provides the unique advantage of not requiring an agent to be installed.

# Ansible

Ansible is a radically simple IT automation engine that automates cloud provisioning, configuration management, application deployment, intra-service orchestration, and many other IT needs.

Designed for multi-tier deployments since day one, Ansible models your IT infrastructure by describing how all of your systems inter-relate, rather than managing one system at a time.

Ansible is agentless and requires no additional custom security infrastructure, so it's easy to deploy. Most importantly, it uses a very simple language (YAML, in the form of Ansible Playbooks) that allow teams to describe automation jobs in a way that approaches plain English.

# Solution

Server and Network configuration can be standardized using Pluribus Ansible modules. Customers do not need to worry about learning programming languages or different API's but can now use common YAML based configuration provisioning system to provision large networks of 1000s of devices.

Pluribus Open Netvisor Linux (ONVL) combines the benefits of Linux with a distributed controller fabric. ONVL doesn't just present itself as a simple Linux OS. This distributed controller which provides a single point of management within a fabric, further simplifies automation by presenting all nodes in a single fabric. A simple example would be a VLAN with fabric scope needs to be

provisioned only once in a 24 switch pod which is part of the same fabric and Ansible YAML parameters for VLAN provisioning don't need to be repeated 24 times for each node.

The following key features are supported by Pluribus Ansible modules:

- Pluribus Supports Layer 2 and Layer 3 Network deployments
- Pluribus Supports Fabric aware Ansible based provisioning
- Pluribus Supports Individual Ansible based provisioning

Diagram1: Network Architectures supported
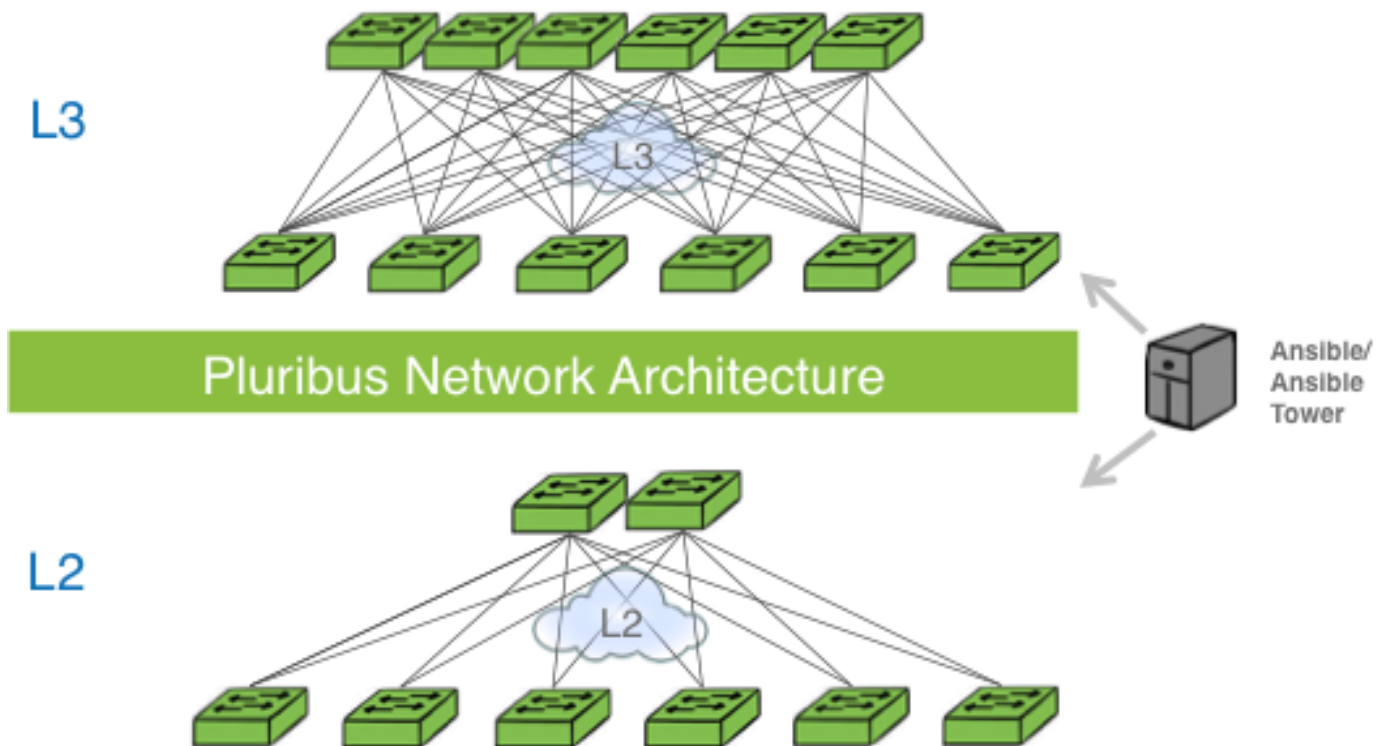


# Conclusion

Ansible automates repetitive configuration tasks. A traditional CLI (Command Line Interface) is paired with fabric-wide programmability (C, Java, RESTful, API) and now adding support for Ansible adds an ease of automation without requiring to write code to use API's.

# About
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Pluribus Networks provides data center solutions that allow your business to run unconstrained. Our software-defined, open networking, fabric-based solutions transform existing network infrastructures into flexible and strategic assets fully aligned with today's digital business needs. Our Virtualization-Centric Fabric (VCF™) architecture provides unprecedented insight, agility and security to customers seeking to simplify operations, run more cost effectively and bring new applications online faster.

Learn more at www.pluribusnetworks.com and @pluribusnet.

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